## **Listing and Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

- 1.(currently amended) A method of compensating for offset in a received signal, the signal being modified by a sequence of symbols, each symbol extending over  $T_s$  signal samples, the method comprising the steps of:
- (a) dividing the received signal into frames;
- (b) dividing each frame into a plurality of  $N_b$  sub-frames, wherein each sub-frame overlaps an adjacent sub-frame;
- (e) forming  $N_b$  sequences of values, the values being derived from the corresponding sub-frame within each frame; and
- (d) taking said  $N_b$  sequences as successive estimates of a frame sequence correctly aligned (to the sequence of symbols.
- 2.(currently amended) A <u>The method as claimed inof</u> claim 1, wherein each frame is of predetermined length Ts.
- 3.(currently amended) A-<u>The</u> method as claimed inof claim 1, wherein there is an interframe overlap of an adjacent frame.
- 4. (cancelled)
- 5.(currently amended) A-The method as claimed inof claim 1, wherein  $N_b$  lies within the range 2 to 8.
- 6.(currently amended) A-The method as claimed inof claim 1, wherein the sequence of symbols comprises  $L_w$  symbols, the received signal being divided into  $L_F$  frames, wherein  $L_F$  is an integral integer multiple of  $L_w$ .

7.(currently amended) A<u>The</u> method <u>as claimed inof</u> claim 1, wherein said sequence of symbols comprises a sequence of values convolved with a window shaping function that has a band limited frequency behavior and a<u>is</u> smooth<u>ed according to a smoothing factor s<sub>f</sub> temporal behavior.</u>

## 8. (cancelled).

- 9.(currently amended) A<u>The</u> method <u>as claimed inof</u> claim 1, wherein said sequence of symbols comprises a sequence of at least one of raised cosine functions or bi-phase functions.
- 10.(currently amended) A<u>The</u> method <u>as claimed inof</u> claim 1, wherein said offset is a time offset.
- 11.(currently amended) A-<u>The</u> method <u>as claimed in of</u> claim 1, the method-further comprising processing each estimate as though it were the correctly aligned frame sequence, <u>so as to for</u> determine<u>ing</u> which estimate is the <u>a</u> best estimate.
- 12.(currently amended) A<u>The</u> method as claimed inof claim 11, wherein the best estimate is assumed to be the <u>a</u> first estimate that, when processed, exceeds one or more predetermined conditions; said processing of estimates stopping once the best estimate has been determined.
- 13.(currently amended) A<u>The</u> method as claimed inof claim [[1]]12, the method further comprising:

the step of correlating each of said estimates with a reference corresponding to said sequence of symbols; and

taking the estimate with the <u>a</u> maximum correlation peak value as the best estimate.

14.(currently amended) A<u>The</u> method asof claim 11, wherein once a first best estimate has been determined for a first signal or portion of a signal, the method is repeated for a further received signal or portion of a signal, the estimates from said further signal being processed in an order dependent upon said first best estimate.

15.(currently amended) A computer readable medium having stored thereon computer executable code for, when executed by a computer, performing program arranged to perform the method as claimed in claim 1.

## 16. (cancelled)

17. (original) A method of making available for downloading a computer program as claimed in claim 15.

18.(currently amended) An apparatus arranged to compensate for offset in a received signal, the signal being modified by a sequence of symbols, each symbol extending over  $T_s$  signal samples, the apparatus comprising:

a divider arranged to divide the received signal into frames;

a divider arranged to divide each frame into a plurality of  $N_b$  sub-frames, wherein each sub-frame overlaps an adjacent sub-frame; and

a processor arranged to form  $N_b$  sequences of values, the values being derived from the corresponding sub-frame within each frame; and to take said  $N_b$  sequences as successive estimates of a frame sequence correctly aligned with the sequence of symbols.

- 19. (currently amended) An-The apparatus elaimed in of claim 18, the apparatus further comprising a buffer arranged to store said  $N_b$  sequences.
- 20. (currently amended) A decoder <u>arranged to compensate for offset in a received signal, the signal being modified by a sequence of symbols, each symbol extending over  $T_s$  signal samples, comprising:</u>

a divider arranged to divide the received signal into frames;

a divider arranged to divide each frame into a plurality of  $N_b$  sub-frames,

wherein each sub-frame overlaps an adjacent sub-frame; and

a processor arranged to form  $N_b$  sequences of values, the values being derived from the corresponding sub-frame within each frame; and to take said  $N_b$  sequences as successive estimates of a frame sequence correctly aligned with the sequence of symbols.

comprising the apparatus as claimed in claim 18.